

# Discussion and Conclusion Sections for Empirical Research Papers

an overview

If you have not already, you may wish to review the [Overview of Empirical Research Papers](#) before using this resource. An annotated Discussion section and other empirical research paper resources are available [here](#).

## What is the purpose of the Discussion section in an empirical research paper?

In an empirical research paper, the purpose of the Discussion section is to interpret the results and discuss their implications, thereby establishing (and often qualifying) the practical and scholarly significance of the present study. It may be helpful to think of the Discussion section as the inverse of the [introduction to an empirical research paper](#). Both sections help position the present study within one or more broader scholarly conversations. However, the introduction *narrows* from a broad problem to a particular research question, while the Discussion section *expands* from the particular findings of the present study to their broader implications.

## Typical structure of the Discussion section in an empirical research paper:

Discussion sections follow a narrow-to-broad structure. There are some variations among disciplines (for example some employ subsections in the Discussion while others do not), but most make some or all of the following moves:

- **Reiterate key findings** (1 sentence - 1 paragraph). As directly and succinctly as possible, emphasize the answer to the research question, along with other important findings. What are the main contributions of your study to the state of knowledge on the topic?
- **Connect to existing literature** (1-2 paragraphs). Explain whether or not (and in what ways) the findings confirm, support, or challenge existing research (or theoretical knowledge) on the topic. What similarities and differences exist between your results and the findings of other studies on the topic?
- **Interpret results** (2+ paragraphs). Explain what your results mean and why you think you got the results you did. What do you know now that you didn't know before? What are the broader implications of your study? What is suggested by your results? What possible explanations are there for unexpected findings, ambiguous findings, or findings that challenge the current understanding of your topic?
- **Describe limitations** (1-3 paragraphs; often, this appears as a "Limitations" subsection). Offer an honest accounting of the limitations of your study. Are there potential sources of bias that could impact the validity of your findings? Did anything go wrong during participant recruitment, data collection, or data analysis—and if so, how might that have affected results? How might the size and makeup of your participant pool limit the generalizability of your results? What are the limitations of the measurements you took or the instruments that you used? Are there any alternative explanations for your findings? What might you do differently if you had the study to do over again?
- **Discuss implications for practice** (1-3 paragraphs; in some disciplines, this may appear as a labeled subsection, such as "Nursing Implications," while in other disciplines, this information may be addressed in the initial interpretation of results or in the conclusion). Explain how practitioners or professionals should use the results. How should the findings affect what practitioners or professionals in the field do on a day-to-day basis? Do the findings align with best practices in the field? Do the findings suggest there should be changes in the policies that govern practitioners or professionals? What barriers might limit individuals' or organizations' ability to implement your recommendations or apply your results (e.g., costs, facilities, or training needs)?
- **Conclude and make recommendations for future research** (1 paragraph; in some disciplines, this may appear as a "Conclusion" subsection or as an independent section that follows the Discussion section). According to the *APA Publication Manual*, Discussion sections should end "with a reasoned and justifiable commentary on the importance of your findings." The final sentence(s) of the paper often offer recommendations for future research. How might your study explain, clarify, or alleviate the problem outlined in the introduction to the paper? How should your findings affect theory or practice in your field? Who might benefit from your results (and how)? What questions remain unanswered? What questions arose because of your findings? What gaps in knowledge should researchers explore next?

### Tips and pitfalls to avoid:

- New researchers sometimes confuse the purposes of the [Results/Findings section](#) and Discussion section. Although you should re-emphasize your most important findings at the beginning of the Discussion, avoid re-hashing the entire Results section. The Discussion section is meant to interpret findings rather than simply report them. The emphasis should be on analysis rather than summary of your results. An effective Discussion section will answer these questions: What do the results mean? Why do you think you got those results? How confident are you in your results? What (if anything) should researchers, practitioners, and the general public do with your results?
- Make sure to appropriately moderate the claims you make in this section. To avoid inflating the significance of your study, use [qualifying language](#). Consider using words like *could*, *might*, *may* instead of *will*. It may make sense to offer a *possible*, *probable*, or *likely* explanation rather than a definite one. Rather than saying something *is* the case, you may wish to say something *appears to be* the case. Make sure your word choices accurately reflect the level of certainty (or doubt) you have about your claims.
- Make sure to review examples of Discussion sections from sample papers or journal articles in your discipline, as conventions for structure, content, and length differ by discipline and among journals.